Amendments to the Specification

Please replace the paragraph beginning at page 8, line 21, with the following amended paragraph:

The scatter angle Θ can be determined on the basis of the arrangement of the examination zone ~~15~~ 13 irradiated by the fan beam 41 and the detector unit 16 as shown in FIG. 7. As opposed to known two-dimensional methods based on back projection, this Figure takes into account the real geometry in medical applications. For one or each detector element D_i this gives rise to different scatter angles Θ which are calculated in conformity with the following equation:

$$\Theta = \arctan(a/d) \qquad (2)$$

Therein, d denotes the distance of a scatter center S_i and a denotes the distance between the detector element D_i and the foot 12 of the detector.

Please replace the paragraph beginning at page 8, line 30, with the following amended paragraph:

The detector D_i detects rays which have been scattered at the angles $\Theta_1 < \Theta < \Theta_2$ in the examination zone ~~15~~ 13 irradiated by the fan beam 41.

Please replace the paragraph beginning at page 7, line 1, with the following amended paragraph:

This will be described in detail with reference to FIG. 5. Therein, the reference numeral ~~17~~ 18 denotes the circular trajectory along which the radiation source irradiates the examination zone. The reference numeral 413 denotes a fan-shaped radiation beam which emanates from the radiation source position S_0 and whose rays propagate in a plane containing the axis of rotation 14. The conical radiation beam emitted by the radiation source in the position S_0 may be assumed to consist of a plurality of flat fan beams which are situated in planes which are parallel to the axis of rotation 14 which intersect in the radiation source position. FIG. 5 shows only a single one of these fan beams, that is, the fan beam 413.